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What is claimed is:

1.   A method of determining parameters inside of a subterranean formation comprising the steps of:

assigning a unique identification number to each data sensor of a plurality of wireless data sensors;

introducing the plurality of data sensors into the subterranean formation; and

communicating certain data from each data sensor, including its unique identification number, to a data interrogator tool.

2.   The method of determining parameters inside of a subterranean formation according to claim 1 further comprising the step of activating each data sensor to measure formation parameters and record data.

3.   The method of determining parameters inside of a subterranean formation according to claim 2 wherein the data being recorded includes temperature, pressure and/or any other formation parameter of interest.

4.   The method of determining parameters inside of a subterranean formation according to claim 1 further comprising the step of activating each data sensor to communicate its respective certain data to at least one adjacent data sensor.

5.   The method of determining parameters inside of a subterranean formation according to claim 4 wherein at least three data sensors are provided.

6.   The method of determining parameters inside of a subterranean formation according to claim 5 wherein a first data sensor communicates its unique identification number and a time stamp to a second data sensor and a third data sensor communicates its unique identification number and a time stamp to the second data sensor as well as the unique identification number and time stamp of the first data sensor.

7.   The method of determining parameters inside of a subterranean formation according to claim 6 further comprising the step of employing an algorithm to calculate the location of each data sensor within the subterranean formation using the identification number and time stamp data received from each of the data sensors.

8.   The method of determining parameters inside of a subterranean formation according to claim 7 wherein the algorithm comprises a triangulation routine.

9.   The method of determining parameters inside of a subterranean formation according to claim 1 further comprising the step of interrogating each data sensor for its respective certain data.

10.   The method of determining parameters inside of a subterranean formation according to claim 1 further comprising the step of communicating each data sensor's respective certain data to a data processor.

11.   The method of determining parameters inside of a subterranean formation according to claim 1 wherein the plurality of data sensors form a wireless ad hoc network and telemeter data from each data sensor back to the data interrogator tool.

12.   The method of determining parameters inside of a subterranean formation according to claim 1 further comprising the step of mixing the plurality data sensors with conventional proppants prior to introducing the plurality of data sensors into the subterranean formation.

13.   A data collection and processing system for determining parameters inside of a subterranean formation comprising:

a plurality of wireless data sensors adapted for injection into a subterranean formation;

a data interrogator tool, which is in data communication with the plurality of wireless data sensors; and

a data processor, which is in data communication with the data interrogator tool.

14.   The data collection and processing system according to claim 13 further comprising a wireline or other telemetry device that connects the data interrogator tool to the data processor.

15.   The data collection and processing system according to claim 13 wherein each of the plurality of data sensors is self-energized.

16.   The data collection and processing system according to claim 15 wherein each of the plurality of data sensors comprises one of an on-board thin film battery, micro-nuclear battery or other type of miniature battery.

17.   The data collection and processing system according to claim 13 wherein the data interrogator tool is integrated with an RF energy source and each of the plurality of data sensors is passively energized using an RF antenna, which picks up energy from the RF energy source.

18. The data collection and processing system according to claim 13 wherein each of the data sensors comprises a MEMS device.

19. The data collection and processing system according to claim 13 wherein the plurality of data sensors form a wireless ad hoc network and telemeter data recorded by each data sensor back to the data interrogator tool.

20. The data collection and processing system according to claim 13 wherein each of the plurality of data sensors communicates certain data to an adjacent data sensor, including a unique identification number.

21. The data collection and processing system according to claim 20 wherein the certain data communicated to the adjacent data sensor includes data received from at least one other data sensor.

22. The data collection and processing system according to claim 21 wherein at least three data sensors are provided.

23. The data collection and processing system according to claim 22 wherein a first data sensor communicates its unique identification number and a time stamp to a second data sensor and a third data sensor communicates its unique identification number and a time

stamp to the second data sensor as well as the unique identification number and time stamp of the first data sensor.

24.   The data collection and processing system according to claim 23 wherein the data processor comprises an algorithm that calculates the location of each data sensor within the subterranean formation using the identification number and time stamp data received from each of the data sensors.

25.   The data collection and processing system according to claim 24 wherein the algorithm comprises a triangulation routine.

26.   The data collection and processing system according to claim 13 wherein the data interrogator tool is located down hole in a well bore formed within the subterranean formation and the data processor is located at the surface.